

# Effect of additives on the dissipation of pesticides on the solid/gas interface

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## Introduction

After the application of plant protection products, a fraction of the active ingredient (a.i.) might enter the atmosphere through volatilisation. Vapour pressure ( $V_p$ ) is one of the most dominant factor that influences the volatilisation of the a.i. from both soil and plants (Bedos et al., 2002). However, the vapour pressure of pesticides is determined with the pure component. When pesticides are used in the field, a mixture of pesticides and adjuvants is used. However, vapour pressure of such a mixture is not available. Furthermore, the influence of adjuvants on the volatilisation of these mixtures is not known. Having a better insight on this can help us to better understand the volatilisation process. Laboratory experiments were performed to evaluate the effect of additives on the volatilisation of pesticides. Pesticides were applied in a wind tunnel and samples were analysed according to a time schedule (Da Silva et al., 2001). Pesticide residues were determined and the volatilisation parameters were compared. The measured data were statistically analysed and the effect of the adjuvants on the volatilisation of the pesticides was evaluated.

**Key words:** pesticides, volatilisation, adjuvants

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